

116TH CONGRESS
1ST SESSION

H. R. 855

To minimize the economic and social costs resulting from losses of life, property, well-being, business activity, and economic growth associated with extreme weather events by ensuring that the United States is more resilient to the impacts of extreme weather events in the short- and long-term, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 29, 2019

Mr. PETERS (for himself, Mr. HUFFMAN, Mr. CONNOLLY, Mr. TONKO, Ms. STEFANIK, and Mr. QUIGLEY) introduced the following bill; which was referred to the Committee on Transportation and Infrastructure

A BILL

To minimize the economic and social costs resulting from losses of life, property, well-being, business activity, and economic growth associated with extreme weather events by ensuring that the United States is more resilient to the impacts of extreme weather events in the short- and long-term, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Strengthening The Re-
3 silency of Our Nation on the Ground Act” or the
4 “STRONG Act”.

5 **SEC. 2. FINDINGS AND PURPOSE.**

6 (a) FINDINGS.—Congress makes the following find-
7 ings:

8 (1) Extreme weather has serious economic costs
9 for Americans, American businesses, and State and
10 local governments. Hurricanes, droughts, floods, tor-
11 nadoes, extreme heat, and extreme cold cause death,
12 result in loss of property and well-being, especially
13 among the most vulnerable populations, and nega-
14 tively impact business activity and economic growth.

15 (2) In the past 10 years, there have been more
16 than 109 weather-related disasters in the United
17 States, generating \$715.8 billion in total losses.

18 (3) According to NOAA, in 2018 there were 11
19 weather and climate disaster events that each caused
20 \$1 billion in damage across the United States.

21 (4) These events and natural disaster trends,
22 when combined with the volatility of weather, ongo-
23 ing demographic changes, and development in high
24 risk areas, indicate that the negative impacts of ex-
25 treme weather events and natural disasters have the
26 potential to increase over time. The fact that a sig-

1 nificant number of people and assets continue to be
2 located in areas prone to volatile and extreme weather
3 indicates that these events will continue to be ex-
4 pensive and deadly if the United States fails to en-
5 hance its resiliency to such events. Recent studies
6 show that the intensity and frequency of some types
7 of, but not all, extreme weather events will likely in-
8 crease in the future.

9 (5) Economic savings can be achieved by con-
10 sidering the impacts of extreme weather over the
11 short- and long-term in the planning process. For
12 example, a 2017 review of the Federal Emergency
13 Management Agency's hazard mitigation programs,
14 conducted by the National Institute of Building
15 Sciences' Multi-Hazard Mitigation Council, found
16 that on average, society saves \$6 for every \$1 spent
17 on mitigation projects, such as elevating floodprone
18 buildings, improving stormwater management sys-
19 tems, following practices to reduce fire hazards, and
20 building earthquake-resistant structures.

21 (6) There are several efforts currently under-
22 way at the Federal, regional, tribal, State, and local
23 levels that have helped lay the foundation for a fed-
24 erally coordinated effort to increase the Nation's re-
25 siliency to extreme weather events, such as the Hur-

1 Hurricane Sandy Rebuilding Task Force, the Presidential Policy Directive on National Preparedness
2 (referred to in this Act as “PPD–8”), the National
3 Preparedness System, the whole community approach led by the Department of Homeland Security,
4 and the Silver Jackets Program by the Army Corps of Engineers. Other recent reports on this
5 subject include the National Academies of Sciences’
6 reports “Disaster Resilience: A National Imperative”
7 and “Building Community Disaster Resilience
8 through Public-Private Collaboration”.

12 (b) PURPOSE.—The purpose of this Act is to minimize the economic and social costs and future losses of
13 life, property, well-being, business activity, and economic
14 growth by making the United States more resilient to the
15 impacts of extreme weather events over the short- and
16 long-term, thereby creating business and job growth opportunities by—

19 (1) ensuring that the Federal Government is
20 optimizing its use of existing resources and funding
21 to support State and local officials, businesses, tribal
22 nations, and the public to become more resilient, including—

24 (A) encouraging the consideration of, and
25 ways to incorporate, extreme weather resilience

1 across Federal operations, programs, policies,
2 and initiatives;

3 (B) promoting improved coordination of
4 existing and planned Federal extreme weather
5 resilience and adaptation efforts that impact ex-
6 treme weather resilience and ensuring their co-
7 ordination with, and support of, State, local, re-
8 gional, and tribal efforts;

9 (C) minimizing Federal policies that may
10 unintentionally hinder or reduce resilience, such
11 as damaging wetlands or other critical green in-
12 frastructure, or lead Federal agencies to oper-
13 ate at cross-purposes in achieving extreme
14 weather resilience; and

15 (D) building upon existing related efforts,
16 such as the Hurricane Sandy Rebuilding Task
17 Force, the PPD–8, the National Preparedness
18 System, and the whole community approach;

19 (2) communicating the latest understanding
20 and likely short- and long-term human and economic
21 impacts and risks of extreme weather to businesses
22 and the public;

23 (3) supporting decisionmaking that improves
24 resilience by providing forecasts and projections,

1 data decision-support tools, and other information
2 and mechanisms; and

3 (4) establishing a consistent vision and strategic
4 plan for extreme weather resilience across the Fed-
5 eral Government.

6 **SEC. 3. DEFINITIONS.**

7 In this Act:

8 (1) DIRECTOR.—The term “Director” means
9 the Director of the Office of Science and Technology
10 Policy.

11 (2) EXTREME WEATHER.—The term “extreme
12 weather” includes severe and unseasonable weather,
13 heavy precipitation, hurricanes, storm surges, torna-
14 does, other windstorms (including derechos), extreme
15 heat, extreme cold, and other qualifying weather
16 events as determined by the interagency group es-
17 tablished under section 4(a)(1).

18 (3) RESILIENCE.—The term “resilience” means
19 the ability to prepare and plan for, absorb, recover
20 from, and more successfully adapt to adverse events
21 in a timely manner.

22 **SEC. 4. EXTREME WEATHER RESILIENCE GAP AND OVER-**

23 **LAP ANALYSIS.**

24 (a) INTERAGENCY WORKING GROUP.—

25 (1) IN GENERAL.—

25 (A) the Office of Management and Budget;

(B) the National Security Staff;

(C) the Council of Economic Advisors;

(D) the Council on Environmental Quality;

4 and

(E) the Domestic Policy Council.

6 (3) CONSULTATION WITH TRIBAL, STATE, AND

7 LOCAL REPRESENTATIVES.—

15 (i) 1 representative from the National
16 Emergency Management Association;

1 gregate, represent all of the key sectors set
2 forth in subsection (b)(1).

3 (C) MEETINGS.—The Director shall meet
4 with the representatives described in subparagraph
5 (A) not fewer than 9 times during the
6 development of—

7 (i) the gap and overlap analysis under
8 this section; and

9 (ii) the National Extreme Weather
10 Resilience Action Plan under section 5.

11 (4) COOPERATION BY FEDERAL AGENCIES.—In
12 carrying out the activities described in subsection
13 (b), Federal agency representatives participating in
14 the working group shall be forthright and shall fully
15 cooperate with the Office of Science and Technology
16 Policy.

17 (5) DETAILEES.—Upon the request of the Director,
18 each agency or entity referred to in paragraph
19 (1) shall provide the working group with a
20 detailee, without reimbursement from the working
21 group, to support the activities described in subsec-
22 tion (b), section 5, and section 7(a). Such detailee
23 shall retain the rights, status, and privileges of his
24 or her regular employment without interruption.

1 (6) VOLUNTEER SERVICES.—Notwithstanding
2 section 1342 of title 31, United States Code, the
3 working group may investigate and use such vol-
4 untary services as the working group determines to
5 be necessary.

6 (b) GAP AND OVERLAP ANALYSIS.—In conducting
7 the gap and overlap analysis required under subsection
8 (a)(1), Federal agency representatives shall—

9 (1) develop a Federal Government-wide working
10 vision for resilience to the impacts of extreme weath-
11 er events in the short- and long-term, in accordance
12 with the purpose set forth in section 2(b), through
13 an effort led by the Director and the interagency
14 working group, which includes goals and objectives
15 for key sectors. Key sectors shall include—

16 (A) agriculture;

17 (B) forestry and natural resources man-
18 agement;

19 (C) water management, including supply
20 and treatment;

21 (D) energy supply and transmission;

22 (E) infrastructure, including natural and
23 built forms of water and wastewater, transpor-
24 tation, coastal infrastructure, and other land-
25 scapes and ecosystems services;

(F) public health and healthcare delivery, including mental health and hazardous materials management;

(G) communications, including wireless communications;

6 (H) housing and other buildings;

7 (I) national security;

8 (J) emergency preparedness;

9 (K) insurance; and

(L) other sectors that the Director considers appropriate;

12 (2) consider and identify the interdependencies
13 among the key sectors when developing the vision re-
14 ferred to in paragraph (1);

22 (A) individual Federal agency programs,
23 policies, regulations, and initiatives, and re-
24 search and data collection and dissemination ef-
25 forts;

(B) areas of collaboration and coordination across Federal agencies; and

6 (4) identify specific Federal programs, statutes,
7 regulations, policies, and initiatives which may unin-
8 tentionally hinder resilience efforts, including an
9 analysis of disincentives, barriers, and incompatible
10 programs, policies, or initiatives across agencies and
11 sectors;

16 (6) work together to identify and evaluate existing
17 Federal tools and data to describe, analyze, forecast,
18 and model the potential impacts identified
19 under paragraph (5) and develop recommendations
20 to strengthen their ability to provide reliable and accurate
21 forecasts at the national, regional, State, and local levels;

1 short- and long-term extreme weather resilience, by
2 comparing the goals and objectives identified for
3 each sector and across sectors with the summaries
4 identified in paragraph (3), specifically identifying
5 gaps relating to—

6 (A) individual Federal agency programs,
7 policies, and initiatives, and research data col-
8 lection and dissemination efforts;

9 (B) areas of collaboration and coordination
10 across Federal agencies; and

11 (C) areas of coordination with State and
12 local agencies and private entities, and regional
13 cooperation;

14 (8) determine potential measures to address the
15 issues referred to in paragraph (4) and to address
16 the gaps and overlaps referred to in paragraph (7)
17 by—

18 (A) designating individual or multiple Fed-
19 eral agencies to address these gaps;

20 (B) building upon existing delivery mecha-
21 nisms;

22 (C) evaluating options for programs, poli-
23 cies, and initiatives that may particularly ben-
24 efit extreme weather resilience efforts, including
25 the role of ecosystem-based approaches;

1 (D) recommending modifications to existing
2 Federal agency programs, statutes, regulations,
3 policies, and initiatives to better support
4 extreme weather resiliency;

5 (E) requesting new authorities and resource requirements, if needed; and

6 (F) identifying existing Federal Government processes that can be built upon to address the purpose of this Act; and

7 (9) establish, with the assistance of the General
8 Services Administration or such other Federal agency as the Director may designate, a Federal advisory working group to provide ongoing collective input to the process.

15 (c) WORKING GROUP.—The Federal advisory working group established pursuant to subsection (b)(9) shall consist of relevant private sector, academic, State and local government, tribal nation, regional organization, vulnerable population, and nongovernmental representatives, with representation from each sector described in paragraph (1). The Director may designate an existing Federal advisory committee under which the working group would operate independently, with the same rights and privileges held by members of the advisory committee. The members of the working group established pursuant to subsection

1 (b)(9) may not simultaneously serve as members of the
2 advisory committee designated pursuant to this sub-
3 section. The activities of the working group should com-
4 plement and not duplicate the stakeholder process con-
5 ducted under PPD–8.

6 **SEC. 5. NATIONAL EXTREME WEATHER RESILIENCE AC-**
7 **TION PLAN.**

8 (a) IN GENERAL.—Based on the results of the gap
9 and overlap analysis conducted under section 4, the Direc-
10 tor, working with the interagency working group estab-
11 lished under such section, and considering the efforts de-
12 scribed in section 2(a)(9), shall develop a National Ex-
13 treme Weather Resilience Action Plan (referred to in this
14 section as the “Plan”—

15 (1) to build upon existing Federal Government
16 processes referred to in section 4(b)(8)(F)—

17 (A) to address the results of the gap and
18 overlap analysis under section 4; and

19 (B) to incorporate the activities required
20 under subsection (c);

21 (2) to best utilize existing resources and pro-
22 grams through improved interagency coordination
23 and collaboration;

1 (3) to improve Federal coordination with existing
2 regional entities, State and local governments,
3 networks, and private stakeholders;

4 (4) to make data and tools accessible and understandable and to help facilitate information exchange for tribal, State, and local officials, businesses, and other stakeholders in a manner that addresses the needs expressed by these stakeholders;

5 (5) to facilitate public-private partnerships;

6 (6) to improve Federal agencies' economic analytical capacity to assess—

7 (A) the likelihood and potential costs of extreme weather impacts by region and nationally; and

8 (B) the relative benefits of potential resilience measures to multiple stakeholders;

9 (7) to provide tools to stakeholders—

10 (A) to conduct analyses similar to those described in paragraph (6); and

11 (B) to support decisionmaking;

12 (8) to support resiliency plans developed by State and local governments, regional entities, and tribal nations, to the extent possible; and

13 (9) to request further resources, if necessary, to fill in gaps to enable national resilience to extreme

1 weather, including resilience of tribal nations, and
2 particularly vulnerable populations, and the use of
3 green infrastructure and ecosystem-based solutions.

4 (b) COOPERATION.—Any Federal agency representa-
5 tive contacted by the Director, in the course of developing
6 the Plan, shall be forthright and shall fully cooperate with
7 the Office of Science and Technology Policy, as requested.

8 (c) REQUIRED ACTIVITIES.—

9 (1) RESPONSIBILITIES.—The Plan shall include
10 specific Federal agency and interagency responsibil-
11 ities, identify potential new authorities, if necessary,
12 and employ risk analysis—

13 (A) to address the gaps identified through
14 the gap and overlap analysis; and

15 (B) to improve Federal interagency coordi-
16 nation and Federal coordination with State, re-
17 gional, local, and tribal partners.

18 (2) AVAILABLE FUNDING OPPORTUNITIES.—

19 (A) IDENTIFICATION.—The Director shall
20 identify—

21 (i) existing Federal grant programs
22 and other funding opportunities available
23 to support State and local government ex-
24 treme weather resiliency planning efforts;
25 or

(ii) projects to advance extreme weather resiliency.

(C) RESPONSIBILITIES.—Each participating agency shall—

18 (3) INFORMATION PORTAL.—

19 (A) IN GENERAL.—The Plan shall—

(ii) build off and be complementary to existing Federal efforts, including data.gov.

(viii) incentives;

(ix) education and communication ini-

tatives;

(x) decision support tools, including management, short- and long-term economic analysis, and predictive models;

(xi) planning tools;

(xii) public and private sources of assistance; and

(xiii) such other information as the coordinating entity considers appropriate.

(4) COORDINATING ENTITY.—The Plan shall

include the identification of a Federal agency, inter-agency council, office, or program, which participated in the gap and overlap analysis and Plan development. Such entity shall—

(A) coordinate the implementation of the

Plan:

(B) track the progress of such implementa-

tion; and

(C) transfer responsibilities to another

Federal agency, interagency council, office, or program to serve as the coordinating entity if the entities participating in the working group

1 agree that circumstances necessitate such a
2 change.

3 (5) RESILIENCY OFFICER.—Each Federal agen-
4 cy that assists with the gap and overlap analysis re-
5 quired under section 4 shall designate, from among
6 the agency's senior management, a Senior Resiliency
7 Officer, who shall—

8 (A) facilitate the implementation of the
9 agency's responsibilities under paragraph (1);

10 (B) monitor the agency's progress and per-
11 formance in implementing its responsibilities
12 under paragraph (1);

13 (C) report the agency's progress and per-
14 formance to the head of the agency and the co-
15 ordinating entity identified under paragraph
16 (4); and

17 (D) serve as the agency lead in ongoing co-
18 ordination efforts within the Federal agency
19 and between the coordinating entity, other Fed-
20 eral agencies, public and private partners, and
21 stakeholders.

22 (d) PUBLICATION.—

23 (1) DRAFT PLAN.—Not later than 420 days
24 after the date of the enactment of this Act, the Di-

1 rector shall publish a draft of the Plan developed
2 under this section in the Federal Register.

3 (2) PUBLIC COMMENT PERIOD.—During the
4 60-day period beginning on the date on which the
5 draft Plan is published under paragraph (1), the Di-
6 rector shall—

7 (A) solicit comment from the public; and
8 (B) conduct a briefing for Congress to ex-
9 plain the provisions contained in the draft Plan.

10 (3) FINAL PLAN.—Not later than 120 days
11 after the end of the public comment period described
12 in paragraph (2), the Director shall publish the final
13 Plan in the Federal Register.

14 (e) IMPLEMENTATION.—Not later than 630 days
15 after the date of the enactment of this Act, the Director
16 shall begin implementing the final Plan published under
17 subsection (d)(3).

18 (f) FINANCING.—To the extent possible—

19 (1) Federal funding should be used to leverage
20 private sector financing for resilience building activi-
21 ties, consistent with the implementation of the Plan,
22 through public-private partnerships; and

23 (2) Federal grant and loan programs of the
24 Federal agencies participating in the interagency
25 working group for this effort shall consider extreme

1 weather resilience as a key factor when awarding
2 funding, including the projected extreme weather
3 risk to a project over the course of its expected life.
4 (g) TRIBAL, STATE, AND LOCAL RESPONSIBIL-
5 ITIES.—The Plan may not place new unfunded require-
6 ments on State or local governments.

7 **SEC. 6. AUTHORIZATION OF OTHER ACTIVITIES.**

8 (a) IN GENERAL.—Federal agencies are authorized
9 to develop tools and disseminate information to improve
10 extreme weather resilience in the key sectors set forth in
11 section 4(b)(1).

12 (b) OFFICE OF SCIENCE AND TECHNOLOGY POL-
13 ICY.—In conducting the gap and overlap analysis under
14 section 4 and developing the National Extreme Weather
15 Resilience Action Plan under section 5, the Director may
16 carry out additional activities in support of the purpose
17 of this Act.

18 **SEC. 7. REPORTS.**

19 (a) GOVERNMENT ACCOUNTABILITY OFFICE RE-
20 PORT.—Not later than 1 year after the date of the enact-
21 ment of this Act, the Comptroller General of the United
22 States shall submit a report to Congress that—

23 (1) identifies existing Federal Government pro-
24 grams and policies related to disaster relief, re-

1 sponse, and recovery that impede improving short-
2 and long-term extreme weather resilience; and

3 (2) make recommendations for how the pro-
4 grams or policies could be structured differently to
5 better support short- and long-term resilience after
6 an extreme weather event.

7 (b) INITIAL REPORT.—Not later than 2 years after
8 the date of the enactment of this Act, the Director shall
9 submit a report to Congress that contains—

10 (1) the results of the gap and overlap analysis;
11 (2) the final National Extreme Weather Resil-
12 ience Action Plan;

13 (3) an update on the implementation of the
14 plan; and

15 (4) available resources for the sustained imple-
16 mentation of the plan.

17 (c) TRIENNIAL REPORTS.—Not later than 2 years
18 after the submission of the report under subsection (a),
19 and every 3 years thereafter, the coordinating entity iden-
20 tified under section 5(c)(4), in cooperation with the inter-
21 agency working group established under section 4(a), shall
22 submit a report to Congress that—

23 (1) contains an update of the National Extreme
24 Weather Resilience Action Plan;

- 1 (2) describes the progress of the plan's imple-
2 mentation;
- 3 (3) improves upon the original analysis as more
4 information and understanding about extreme
5 weather events becomes available;
- 6 (4) establishes criteria for prioritization of ac-
7 tivities described in the plan;
- 8 (5) reconsiders and makes changes to the plan
9 based on the availability of new information de-
10 scribed in paragraph (3); and
- 11 (6) identifies cost-effective changes to laws,
12 policies, or regulations that could advance the pur-
13 pose of this Act.

14 (d) FEMA REPORTS ON FUNDING.—

- 15 (1) FINDINGS.—Congress finds the following:
- 16 (A) The Federal Emergency Management
17 Agency grant programs are a key vehicle that
18 exists to fund activities related to resiliency
19 planning and projects.
- 20 (B) In order to ensure that the United
21 States becomes more resilient to extreme weath-
22 er, it is important to ensure that sufficient re-
23 sources are available to support resiliency ac-
24 tivities.

1 (2) REPORTS.—At the end of each fiscal year,
2 the Administrator of the Federal Emergency Man-
3 agement Agency (in this paragraph referred to as
4 “FEMA”) shall submit a report to Congress that—
5 (A) identifies the amounts that were made
6 available to FEMA during such fiscal year for
7 State and local entities to use for activities that
8 support the purposes of this Act;
9 (B) identifies the amounts disbursed by
10 FEMA to State and local entities during such
11 fiscal year for such activities;
12 (C) describes the resources requested by
13 State and local entities for activities that sup-
14 port the purposes of this Act; and
15 (D) identifies the difference between the
16 amounts disbursed by FEMA and the amounts
17 requested from FEMA by State and local enti-
18 ties.

19 **SEC. 8. AUTHORIZATION OF APPROPRIATIONS.**

20 (a) AMOUNTS FOR ANALYSIS, PLAN DEVELOPMENT
21 AND IMPLEMENTATION, AND REPORTS.—There are au-
22 thorized to be appropriated such sums as may be nec-
23 essary for fiscal years 2020 through 2022—
24 (1) to conduct the gap and overlap analysis re-
25 quired under section 4;

1 (2) to conduct the activities required under sec-
2 tion 5, including the creation and maintenance of
3 the information portal; and

4 (3) to prepare the reports to Congress required
5 under subsections (b) and (c) of section 7.

6 (b) AVAILABILITY OF FUNDS.—Amounts appro-
7 priated pursuant to subsection (a) shall remain available
8 for the purposes set forth in such subsection through De-
9 cember 31, 2022.

